L Number	Hits	Search Text	DB	Time stamp
-	2	(("4990997") or ("5739579")).PN.	USPAT	2001/12/27 11:43
-	3927	((438/637) or (438/653) or (438/656) or (438/687) or	USPAT;	2003/06/25 10:29
		(438/688) or (438/720)).CCLS.	US-PGPUB;	
			EPO; JPO	
_	1044	((("438/637") or ("438/653") or ("438/656") or ("438/687") or	USPAT	2003/06/25 10:29
		("438/688") or ("438/720")).CCLS.) and (barrier adj layer)	00.71	2000,00,20 ,0.20
_	442	(((("438/637") or ("438/653") or ("438/656") or ("438/687") or	USPAT	2002/01/07 07:58
-	772	((((438/688") or ("438/720")).CCLS.) and (barrier adj layer))	001 71	2002/01/07 07:30
	205	and oxygen	LIODAT	0000/04/04 44:40
-	285	((((("438/637") or ("438/653") or ("438/656") or ("438/687") or	USPAT	2002/01/04 14:48
		("438/688") or ("438/720")).CCLS.) and (barrier adj layer))		
	0.40	and oxygen) and cvd		
-	343	((((("438/637") or ("438/653") or ("438/656") or ("438/687") or	USPAT	2002/01/04 14:49
		("438/688") or ("438/720")).CCLS.) and (barrier adj layer))		
		and oxygen) and (sputtering or pvd)		
-	236	(((((("438/637") or ("438/653") or ("438/656") or ("438/687") or	USPAT	2002/01/04 14:54
		("438/688") or ("438/720")).CCLS.) and (barrier adj layer))	·	
		and oxygen) and cvd) and (((((("438/637") or ("438/653") or	-	
		("438/656") or ("438/687") or ("438/688") or		
		("438/720")).CCLS.) and (barrier adj layer)) and oxygen) and		
		(sputtering or pvd))		
	152	((((((("438/637") or ("438/653") or ("438/656") or ("438/687")	USPAT	2002/01/04 14:54
	, 52	or ("438/688") or ("438/720")).CCLS.) and (barrier adj layer))	001711	2002/01/01 11:01
		and oxygen) and cvd) and ((((("438/637") or ("438/653") or		
		("438/656") or ("438/687") or ("438/688") or		
		("438/720")).CCLS.) and (barrier adj layer)) and oxygen) and		
	120	(sputtering or pvd))) and copper	LICOAT	0000/04/07 07:55
-	138	(((((((("438/637") or ("438/653") or ("438/656") or ("438/687")	USPAT .	2002/01/07 07:55
		or ("438/688") or ("438/720")).CCLS.) and (barrier adj layer))		
		and oxygen) and cvd) and ((((("438/637") or ("438/653") or		
		("438/656") or ("438/687") or ("438/688") or	ı	
		("438/720")).CCLS.) and (barrier adj layer)) and oxygen) and		
		(sputtering or pvd))) and copper) and @ad<=20000208		
-	2	(((((((("438/637") or ("438/653") or ("438/656") or ("438/687")	USPAT	2002/01/04 14:59
		or ("438/688") or ("438/720")).CCLS.) and (barrier adj layer))		
		and oxygen) and cvd) and (((((("438/637") or ("438/653") or		
		("438/656") or ("438/687") or ("438/688") or		
		("438/720")) CCLS.) and (barrier adj layer)) and oxygen) and		
		(sputtering or pvd))) and copper) and @ad<=20000208) and	,	
		(promoting adj layer)		
-	7	((((((((("438/637") or ("438/653") or ("438/656") or ("438/687")	USPAT	2002/01/04 15:00
		or ("438/688") or ("438/720")).CCLS.) and (barrier adj layer))		
		and oxygen) and cvd) and ((((("438/637") or ("438/653") or		
		("438/656") or ("438/687") or ("438/688") or		
		("438/720")).CCLS.) and (barrier adj layer)) and oxygen) and		
		(sputtering or pvd))) and copper) and @ad<=20000208) and		
		(spacering of pva))) and copper) and @ad<=20000200) and () (metal with promoting)		
_	7	(((((((("438/637") or ("438/653") or ("438/656") or ("438/687")	USPAT	2002/01/04 15:01
-	<b>'</b>		JOPAI	2002/01/04 15.01
		or ("438/688") or ("438/720")).CCLS.) and (barrier adj layer))		
		and oxygen) and cvd) and ((((("438/637") or ("438/653") or		
		("438/656") or ("438/687") or ("438/688") or		
		("438/720")).CCLS.) and (barrier adj layer)) and oxygen) and		
		(sputtering or pvd))) and copper) and @ad<=20000208) and		
		(promoting with layer)	<b></b>	
-	2586	((438/637) or (438/653) or (438/656) or (438/687) or	USPAT	2002/01/07 07:57
		(438/688) or (438/720)).CCLS.		
-	684058	((("438/637") or ("438/653") or ("438/656") or ("438/687") or	USPAT	2002/01/07 07:57
		("438/688") or ("438/720")).CCLS.) and barrier layer		
-	1044	((("438/637") or ("438/653") or ("438/656") or ("438/687") or	USPAT .	2002/01/07 07:57
		("438/688") or ("438/720")).CCLS.) and (barrier adj layer)		
-	442	(((("438/637") or ("438/653") or ("438/656") or ("438/687") or	USPAT;	2002/01/07 07:59
		("438/688") or ("438/720")).CCLS.) and (barrier adj layer))	US-PGPUB	
		and oxygen		
		1.9	<del></del>	l

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-	269	((((("438/637") or ("438/653") or ("438/656") or ("438/687") or	USPAT;	2002/01/07 07:59
	Ì	("438/688") or ("438/720")).CCLS.) and (barrier adj layer))	US-PGPUB	
	10	and oxygen) and copper (((((("438/637") or ("438/653") or ("438/656") or ("438/687") or	USPAT;	2002/01/07 08:06
	"	("438/688") or ("438/720")).CCLS.) and (barrier adj layer))	US-PGPUB	2002/01/07 00:00
		and oxygen) and copper) and (diffusion with stop)	00-1 01 05	
_	31	("3844831"   "4242698"   "4367119"   "4386116"   "4451326"	USPAT	2002/01/07 08:04
		"4600624"   "4789648"   "4792534"   "4808552"   "4944836"		
		"4948755"   "4956313"   "4966870"   "4992135"   "4999318"		
		"5000818"   "5010039"   "5055908"   "5117276"   "5122859"		
		"5143820"   "5209817"   "5219787"   "5244837"   "5277985"		
		"5300813"   "5308796"   "5310602"   "5340370"   "5371047"     "5612254").PN.		
_	0	(((((("438/637") or ("438/653") or ("438/656") or ("438/687") or	USPAT;	2002/01/07 08:09
		("438/688") or ("438/720")).CCLS.) and (barrier adj layer))	US-PGPUB	2002/01/07 00:00
		and oxygen) and copper) and (elongation adj time)		
-	10	(((((("438/637") or ("438/653") or ("438/656") or ("438/687") or	USPAT;	2002/01/07 08:32
		("438/688") or ("438/720")).CCLS.) and (barrier adj layer))	US-PGPUB	
	7	and oxygen) and copper) and (Ti-Si-N)	LICDAT	0000/04/07 00:40
=	· '	("5770520"   "5824599"   "5851367"   "5913144"   "5918150"     "5976928"   "6130161").PN.	USPAT	2002/01/07 08:12
_	7	("5770520"   "5824599"   "5851367"   "5913144"   "5918150"	USPAT	2002/01/07 08:31
		"5976928"   "6130161").PN.		
-	1	("5913144").PN.	USPAT	2002/01/07 08:35
] -	24302	((438/???).ccls) and ((257/???).ccls)	USPAT;	2002/01/07 08:37
			US-PGPUB; EPO; JPO;	
			DERWENT;	
			IBM TDB	
-	5813	(((438/???).ccls) and ((257/???).ccls)) and ((ti si n) and	USPAT;	2002/01/07 10:50
		(oxygen o osub2))	US-PGPUB;	
			EPO; JPO;	
_			DERWENT; IBM_TDB	
_	1385	((((438/???).ccls) and ((257/???).ccls)) and ((ti si n) and	USPAT;	2002/01/07 11:34
		(oxygen o osub2))) and (cu copper)	US-PGPUB;	2002/07/07 11:04
			EPO; JPO;	
			DERWENT;	
l_	99	((((438/???).ccls) and ((257/???).ccls)) and ((ti si n) and	IBM_TDB	2002/04/07 00:44
-	] 33	((((436)???).ccis) and ((25/7???).ccis)) and (((15/1) and (0xygen o osub2))) and (diffusion with layer with (cu copper))	USPAT	2002/01/07 08:41
-	7	("5770520"   "5824599"   "5851367"   "5913144"   "5918150"	USPAT	2002/01/07 09:32
		"5976928"   "6130161").PN.		
-	1	("5652464").PN.	USPAT	2002/01/07 10:52
-	14	("4676866"   "4690730"   "4957590"   "4976839"   "5070036"	USPAT	2002/01/07 10:52
		"5162262"   "5175126"   "5232871"   "5236869"   "5240880"   "5371042"   "5466629"   "5514908"   "5552341") PN		
_	3	("4674176"   "4829363"   "4897709").PN.	USPAT	2002/01/07 11:17
-	10	(((((438/???).ccls) and ((257/???).ccls)) and ((ti si n) and	USPAT;	2002/01/07 11:36
		(oxygen o osub2))) and (cu copper)) and (oxygenation or	US-PGPUB;	
		(oxygen adj stuffing))	EPO; JPO;	
			DERWENT;	
_	4	(("4970568") or ("5989988") or ("6090702") or	IBM_TDB USPAT	2002/01/07 14:20
	7	((4970300) of (3989988) of (3090702) of ("5736192")).PN.	OGFAI	2002/01/07 14.20
-	2	("4990997"   "5070036").PN.	USPAT	2002/01/07 14:07
-	2	((opening or trench) with (insulating or insulator)) and	EPO; JPO	2002/01/07 14:23
		(oxygen with layer with concentration)		
-	2	(((opening or trench) with (insulating or insulator)) and	EPO; JPO	2002/01/08 07:16
		(oxygen with layer with concentration)) and (concentration with (low or high))		
[-	1	("4990997").PN.	USPAT	2002/01/08 09:01
	22	4990997.URPN.	USPAT	2002/01/08 07:16

				·
-	22	("3637320"   "3807008"   "4035541"   "4497874"   "4830886"     "4960732"   "4990997"   "5001531"   "5049975"   "5087593"     "5132756"   "5139825"   "5178911"   "5192589"   "5246881"     "5384289"   "5496762"   "5536947"   "5571572"   "5723382"	USPAT	2002/01/08 07:26
		"5893758"   "6081034").PN.		
-	2		USPAT	2002/01/08 09:01
-	1426	((438/627) or (438/628) or (438/643) or (438/644)).CCLS.	USPAT; US-PGPUB;	2002/11/04 11:10
			EPO; JPO	
-	638	(((438/627) or (438/628) or (438/643) or (438/644)).CCLS.) and @ad<=19950705	USPAT; US-PGPUB; EPO; JPO;	2002/11/06 07:31
			DERWENT;	
-	117	((((438/627) or (438/628) or (438/643) or (438/644)).CCLS.) and @ad<=19950705) and oxygen	IBM_TDB USPAT; US-PGPUB;	2002/11/04 11:12
			EPO; JPO; DERWENT; IBM_TDB	
-	49	(((((438/627) or (438/628) or (438/643) or (438/644)).CCLS.) and @ad<=19950705) and oxygen) and ((barrier or seed) with (oxygen oxide))	USPAT; US-PGPUB; EPO; JPO; DERWENT;	2002/11/04 11:13
			IBM_TDB	
-	5	("4931410"   "5124780"   "5444018"   "5462895"   "5470789").PN.	USPAT	2002/11/04 13:00
-	1326	((("438/637") or ("438/653") or ("438/656") or ("438/687") or	USPAT	2002/11/06 07:31
-	639	("438/688") or ("438/720")).CCLS.) and (barrier adj layer) (((438/627) or (438/628) or (438/643) or (438/644)).CCLS.) and @ad<=19950705	USPAT; US-PGPUB;	2002/11/06 07:31
-	92	((((438/627) or (438/628) or (438/643) or (438/644)).CCLS.) and @ad<=19950705) and ((tungsten tantalum) with nitride)	EPO; JPO; DERWENT; IBM_TDB USPAT; US-PGPUB; EPO; JPO; DERWENT;	2002/11/06 08:48
-	23	((((438/627) or (438/628) or (438/643) or (438/644)).CCLS.) and @ad<=19950705) and ((tungsten tantalum) adj nitride)	IBM_TDB USPAT; US-PGPUB;	2002/11/06 07:35
			EPO; JPO; DERWENT; IBM_TDB	
-	2	((((438/627) or (438/628) or (438/643) or (438/644)).CCLS.) and @ad<=19950705) and ((aluminum adj oxide) "al.sub.2o.sub.3") with barrier	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2002/11/06 07:55
-	20	((((438/627) or (438/628) or (438/643) or (438/644)).CCLS.) and @ad<=19950705) and ((aluminum adj oxide) "al.sub.2o.sub.3")	USPAT; US-PGPUB; EPO; JPO; DERWENT;	2002/11/06 08:00
-	168	(438/\$.ccls.) and (((aluminum adj oxide) "al.sub.2o.sub.3") with barrier)	IBM_TDB USPAT; US-PGPUB; EPO; JPO;	2002/11/06 08:01
-	39	((438/\$.ccls.) and (((aluminum adj oxide) "al.sub.2o.sub.3") with barrier)) and @ad<=19950705	DERWENT; IBM_TDB USPAT; US-PGPUB; EPO; JPO;	2002/11/06 08:01
			DERWENT; IBM_TDB	

17	(438/\$.ccls.) and ((tantalum adj nitride) with barrier) and	USPAT;	2002/11/06 08:49
	@ad<=19950705	US-PGPUB;	
		EPO; JPO;	
		DERWENT;	
		IBM_TDB	
8	(("5612254") or ("4910169") or ("5552341") or	USPAT;	2002/11/06 09:27
	("5070036")).PN.	US-PGPUB;	
		EPO; JPO;	
		_	
169	fringing with capacitor		2002/11/06 13:28
5005	(/400/007)	_	0000/00/05 40 00
5335	" , ' , ' , ' , ' , ' , ' , ' , ' , ' ,	,	2003/06/25 10:29
	(438/688) or (438/720)).CCLS.	•	
4546	(//!!430/637!!) a= (!!430/653!!) a= (!!430/656!!) a= (!!430/607!!) a=		0000/00/05 40:30
1546		USPAI	2003/06/25 10:30
26		LICDAT	2002/06/25 40:22
20			2003/06/25 10:33
		US-PGPUB	
5		LICDAT	2003/06/25 10:34
۱ ۲		1 '	2003/00/25 10.34
	, , , , , , , , , , , , , , , , , , , ,	03-53506	·
	8 169 5335 1546 26	8 (("5612254") or ("4910169") or ("5552341") or ("5070036")).PN.  169 fringing with capacitor  5335 ((438/637) or (438/653) or (438/656) or (438/687) or (438/688) or (438/720)).CCLS.  1546 ((("438/637") or ("438/653") or ("438/656") or ("438/688") or ("438/720")).CCLS.) and (barrier adj layer) (((438/637) or (438/653) or (438/656) or (438/687) or (438/688) or (438/720")).CCLS.) and (oxidized) with (titanium adj nitride)  5 (((438/637) or (438/653) or (438/656) or (438/687) or (438/688) or (438/720")).CCLS.) and cvd with (titanium adj	8 (("5612254") or ("4910169") or ("5552341") or ("5070036")).PN.  169 fringing with capacitor  160 JPO; DERWENT; IBM_TDB USPAT; US-PGPUB; EPO; JPO; DERWENT; US-PGPUB; EPO; JPO; DERWENT; US-PGPUB; EPO; JPO; DERWENT; US-PGPUB; EPO; JPO; DERWENT; USPAT; US